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Uncispora sinensis, a new species from China

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Abstract — A second species of *Uncispora*, *U. sinensis,* is described and illustrated. The new fungus was isolated from a submerged leaf collected in Xishuangbanna, Yunnan Province, China. It is distinguished from the type species, *U. harroldiae,* by the shape and septation of its conidia.

Key words — dematiaceous hyphomycete, systematics, aquatic fungi

Introduction

Uncispora R.C. Sinclair & Morgan-Jones (Sinclair & Morgan-Jones 1979) was described for dematiaceous hyphomycetes having brown, macronematous, synnematous or fasciculate conidiophores and subhyaline to pale brown, obclavate conidia that are curved at the apex and truncate at the base. It was originally monotypic for *U. harroldiae* R.C. Sinclair & Morgan-Jones and is similar to *Sporidesmium* Link. We add here a second, new species *Uncispora sinensis*, which was isolated from submerged leaf.

Materials & methods

A culture was isolated from leaves of a dicotyledonous plant submerged in a river in the Xishuangbanna Tropical Botanical Garden, Chinese Academy of Science (21°55′N, 101°16′E, elev. 567 m), Yunnan Province in southwest China, September 2010 (collected by G. Z. Yang). A 3–4 × 6–7 cm rotten leaf was placed on the surface of CMA (20 g cornmeal, 18 g agar, 40 mg streptomycin, 30 mg ampicillin, 1000 mL distilled water) for ten days; single conidia were isolated using a sterilized toothpick while viewing with a CX31 microscope and cultivated on CMA in Petri plates. Morphological observations were made from CMA after incubation at 25°C for one week. Pure cultures and a permanent slide are on deposit in the herbarium of the Laboratory for Conservation and

Utilization of Bio-resources, Yunnan University, Kunming, Yunnan, P.R. China (YMF; formerly Key Laboratory of Industrial Microbiology and Fermentation Technology of Yunnan).

Taxonomy

Uncispora sinensis G.Z. Yang & Z.F. Yu, **sp. nov.** Plate 1

MycoBank MB 519469

Coloniae in agaro pallide brunneae, pilose, effusae, post 10 dies 25°C ad 35 mm diam. Mycelium plerumque in substrato immersum, ex hyphis septatis, ramosis, hyalinis vel pallide brunneae compositum, 1.5–3.0 µm latis. Conidiophora macronemata, synnemata vel in fasiciculata aggregata, erecta, recta vel flexuosa, simplicia vel ramosa, pallide brunnea vel brunnea, sursum pallidiora, laevia, modice crasse tunicata, septata, 60–112 × 2.7–4.1 µm, cellae conidiogenae in conidiophoris incorporatae, monoblasticae, terminales, determinatae, cylindricae. Conidia fasciculata, simplicia vel 1–7 septata, subhyalina vel pallide brunnea, laevia sed verruculosa ubi matura, clavata, rostrata et hamata, ad basem truncata, 67–89 µm longa, 2–3.5 µm crassa, basi 2.5–3 µm apice, 0.8–1.2µm lata.

Type: PR China, Yunnan province, Mengla County, Xishuangbanna Tropical Botanical Garden, on submerged leaves of an unidentified dicotyledonous plant, Sep 2010, G.Z.Yang. (**Holotype**: YMF 1.03683; ex-type culture YMF 1.03683).

Etymology: '*sinensis*' refers to China, the country in which this new species was found.

Colonies pale brown to brown, attaining 35 mm diam after 10 days on CMA at 25°C. Vegetative hyphae hyaline to pale brown, septate, smooth, 1.5–3.0 µm wide, aerial mycelium sparse, hyaline, septate, branched. Conidiophores macronematous, synnematous, or sometimes in a fascicle of a few, very rarely single, arising terminally or laterally on hyphae, erect, frequently branched, pale brown to mid brown, slightly paler towards the apex, smooth, septate, moderately thick-walled, 60–112 × 2.7–4.1 µm. Conidiogenous cells integrated, terminal, cylindrical, monoblastic, determinate, or proliferating percurrently to produce several terminal and subterminal conidia in fascicles. Conidia clavate, 67–89 µm long, 2–3.5 µm at the broadest part, 0.8–1.2 µm wide at the apex, gently curved or hooked at the apex, truncate at base, 0–7 septate, subhyaline to pale brown, smooth or with the wall of the lower cell minutely verruculose at maturity.

Distribution: Known only from the type collection.

Uncispora sinensis was referred easily to *Uncispora* based on its similarity to *U. harroldiae* in having brown, macronematous, synnematous conidiophores and clavate, apically curved or hooked conidia. However, conidia of *U. harroldiae* are solitary, 3–4 septate, while those of *U. sinensis* are fasciculate and 1–7 septate; moreover, conidia of *U. sinensis* are not so conspicuously hooked as they are in *U. harroldiae.*

The role of *U. sinensis* in degradation of litter is the subject of continuing research.

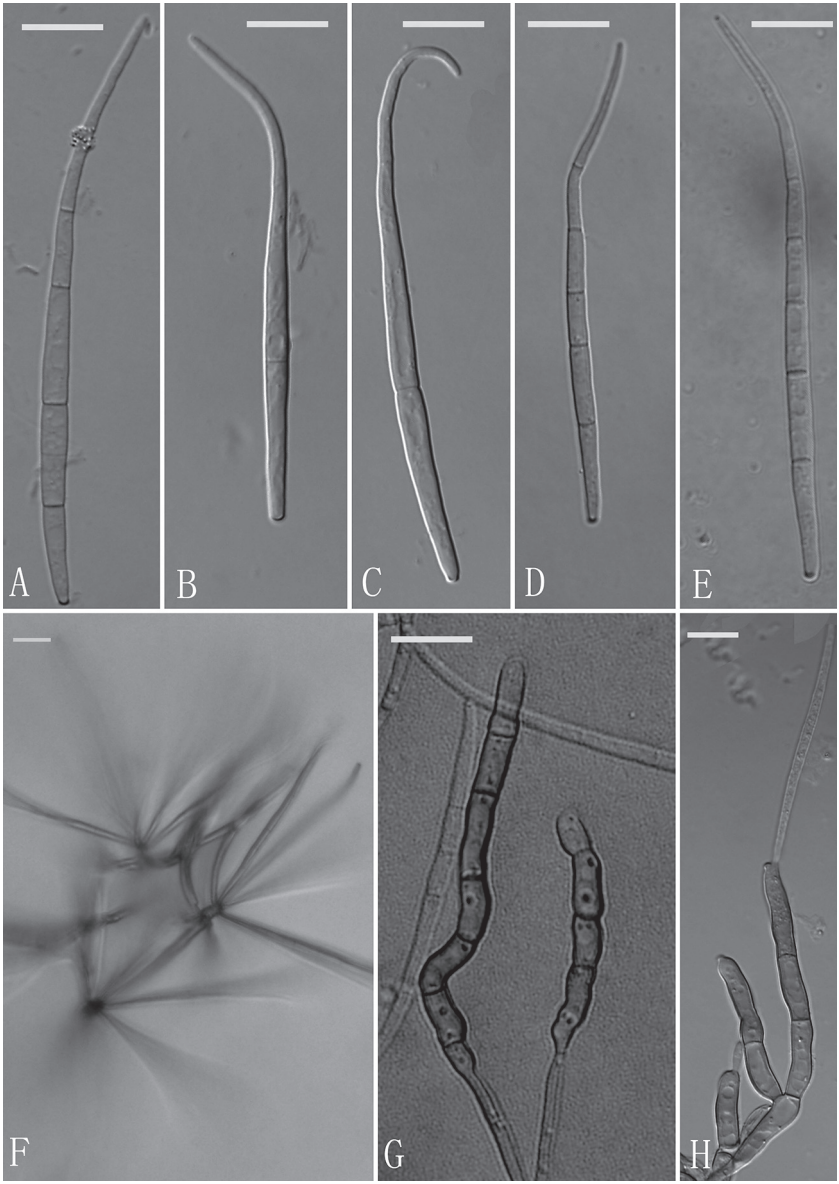

Plate 1. *Uncispora sinensis* (holotype YMF1.03683).
A–E. Conidia. F. Conidiophores bearing conidia in clusters. G–H. Conidiophores.
Scale bar: A–E, G–H = 10 μm, F = 25 μm

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